

Name: \_\_\_\_\_

### p1029: Box multiplication of linear binomials (v12)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	$6x$	$3$	
$2x$	$12x^2$	$6x$	$12x^2 + 6x + 24x + 12$
$4$	$24x$	$12$	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(3x + 9)$  and  $(4x + 6)$ .

*	$3x$	$9$	
$4x$	$12x^2$	$36x$	
$6$	$18x$	$54$	

ANSWER:  $12x^2 + 54x + 54$

### Question 2

Use the box method to multiply  $(6x - 5)$  and  $(3x - 4)$ .

*	$6x$	$-5$
$3x$	$18x^2$	$-15x$
$-4$	$-24x$	$20$

ANSWER:  $18x^2 - 39x + 20$

### Question 3

Use the box method to multiply  $(-7x + 5)$  and  $(-3x + 9)$ .

*	$-7x$	$5$
$-3x$	$21x^2$	$-15x$
$9$	$-63x$	$45$

ANSWER:  $21x^2 - 78x + 45$